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09/601,313	09/11/2000	Beat Huber	L&L8293	2232

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EXAMINER

COLE, LAURA C

ART UNIT

PAPER NUMBER

1744

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/601,313

Applicant(s)

HUBER ET AL.

Examiner

Laura C Cole

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figures 1, 2, 4, and 5 "2B". The specification, Page 4 Line 22 uses the reference "2b." A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 Line 7 it is unclear what is meant by the term "bond." What structural relationship is meant by "bond"? Is the bond a physical or chemical one?

Claim 1 recites the limitation "the injection molding operation" in Lines 7 and 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 Line 8 it is unclear what is meant by "wherein."

Claim 1 Line 9 it is unclear what is meant by "a non-positive firm fit."

Claim 1 Line 12 it is unclear what is meant by "in the manner of."

Claim 2 Line 2 states that there is a "positive fit" however the independent claim, Claim 1 states that the fit is "non-positive" (Line 9.) Claim 2 is contradictory of Claim 1 and needs clarification.

Claim 2 recites the limitation "the surface" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the two molded portions" in Line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 Lines 3-5 are unclear "where the two molded portions touch by parts of the two molded parts engaging in one another."

Claim 7 Line 3 "is selected from the group consisting of polypropylene." Is polypropylene a group?

Claim 7 Lines 4-6 "...consists of acrylonitrile-butadiene styrene, polyamide, and polycarbonate or polyester" is unclear. Is the second molded part consisting of all of these?

Claims 1-7 it is often unclear, as to which "molded part" is being referred to. Claim 1 Lines 10-12 state "the one molded part (2; 32)...by the other molded part (4; 34)." Examiner suggests using consistency in referring to the parts throughout the specification and claims as "first" and "second" parts to eliminate confusion.

3. Claims 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the step" in Line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 is unclear what the first and second steps of the method of producing the toothbrush are.

Claim 8 recites the limitation "the molded parts" in Line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the other molded part" in Lines 5, 9 and 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 Line 7 it is unclear what is meant by the term "bond." What structural relationship is meant by "bond"? Is the bond a physical or chemical one?

Claim 8 Line 11 it is unclear what is meant by "in the manner of."

Claim 9 Line 1 it is unclear what is meant by "wherein."

Claims 8-10 it is often unclear, as to which "molded part" is being referred to. Claim 10 Lines 2-5 state "the molded part (4; 34)...and the molded part (2; 32)." Examiner suggests using consistency referring to the parts throughout the specification and claims as "first" and "second" parts to eliminate confusion.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Desimone et al., USPN 5,339,482.

Desimone et al. discloses a toothbrush having a non-slip surface that has a first molded part (Figures 1 and 2 (12) and (16)) and a second molded part (Figure 1 (22)) that forms a handle, each of the molded parts consisting of a different material (Column 4 Line 64 to Column 5 Line 24) that do not bond during an injection-molding operation producing a firm fit between the molded parts, one molded part (Figure 1 (22)) is partially enclosed by the other molded part. A positive fit is formed by portions that engage the parts and additionally by projections and recesses (Column 4 Lines 34-45.) The two materials are different (Column 4 Line 64 to Column 5 Line 24) and therefore have a different degree of shrinkage. One of the two molded parts, the insert (Figure 1 (22)) consists of two or more plastic components (the ribs (Figure 1 (30)) that are not bonded with the other plastic material of the other molded part. The brush head can be molded from polypropylene and the handle can be molded from styrene-acrylonitrile copolymers (Column 4 Line 46 to Column 5 Line 2.)

Desimone et al. also discloses a method of producing a toothbrush by means of injection molding (Column 4 Line 68 to Column 5 Line 2; Column 5 Lines 22-24) each part separately (Abstract lines 3-5; Column 5 Lines 35-45) not forming any bond.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35-U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desimone et al., USPN 5,339,482.

Desimone et al. discloses all elements mentioned above, however does not disclose that the second molded part consists of styrene acrylonitrile, acrylonitrile-butadiene styrene, polyamide, polycarbonate, or polyester.

Desimone et al. does disclose the use of styrene acrylonitrile copolymers and thermoplastic polymers in general (Column 4 Lines 64-68), but not in the case of the second part (Figure 1 (22)). Desimone et al. further discloses that the insert (22) may be fabricated from a material that is compressible (Column 5 Lines 11-15) or non-compressible (Column 5 Lines 24-34.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to use acrylonitrile-butadiene styrene, polyamide, polycarbonate, or polyester as an engineering choice, since they are thermoplastic polymers and can be manufactured inexpensively.

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desimone et al., USPN 5,339,482.

Desimone et al. discloses all elements mentioned above, however does not disclose that the material that has the lower degree of shrinkage is manufactured in the first step and that specifically styrene acrylonitrile is the material injection molded in the first step and that polypropylene is the material injection molded in the second step.

Desimone et al. does disclose the use of styrene acrylonitrile copolymers and thermoplastic polymers in general (Column 4 Lines 64-68), but not in the case of the second part (Figure 1 (22)). Desimone et al. further discloses that the insert (22) may be fabricated from a material that is compressible (Column 5 Lines 11-15) or non-compressible (Column 5 Lines 24-34.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use acrylonitrile-butadiene styrene, polyamide, polycarbonate, or polyester as an engineering choice, since they are thermoplastic polymers and can be manufactured inexpensively.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone



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numbers for the organization where this application or proceeding is assigned are (703) 746-8772 for regular communications and (703) 873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LCC

LCC

December 16, 2002



ROBERT J. WARDEN, SR.  
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